WHAT IS CLAIMED IS:

1. An amorphous oxide film, comprising:

a non-stoichiometric chromium oxide comprising a negative charge.

2. The amorphous oxide film of Claim 1, further comprising ions selected from a group consisting of oxygen ions, chromium ions, hydroxyl ions, and combinations thereof.

3. An implantable device, comprising:

an amorphous oxide surface film comprising a negative charge thereover to prevent the release of positively-charged ions from said implantable device.

4. The implantable device of Claim 3, wherein said amorphous oxide surface film comprises amorphous oxide particles on a nanometer to sub-nanometer scale.

5. The implantable device of Claim 4, wherein said implantable device is heated within a saturated oxygen atmosphere such that said nanometer to sub-nanometer scale of said amorphous oxide particles form at a faster rate of nucleation than growth.

6. The implantable device of Claim 5, wherein said saturated oxygen atmosphere comprises sodium nitrate.

7. The implantable device of Claim 5, wherein said saturated oxygen atmosphere comprises a nitrate compound.

8. The implantable device of Claim 5, wherein said saturated oxygen atmosphere comprises a nitrate compound selected from the group consisting of sodium nitrate, potassium nitrate, ammonium nitrate, calcium nitrate, chromium nitrate, copper nitrate, iron nitrate, lead nitrate, barium nitrate, and combinations thereof.

9. The implantable device of Claim 5, wherein said saturated oxygen atmosphere comprises pH buffer chemicals selected from the group consisting of sodium bicarbonate, sodium carbonate, sodium hydroxide, and combinations thereof.

10. The implantable device of Claim 5, wherein said saturated oxygen atmosphere comprises pH buffer chemicals selected from the group consisting of sodium bicarbonate, sodium carbonate, sodium hydroxide, phosphate compounds, borate compounds, and combinations thereof.

11. The implantable device of Claim 5, wherein said nanometer to sub-nanometer scale of said amorphous oxide particles results in said amorphous oxide surface film comprising oxygen, chromium and hydroxyl ions therewithin to yield a non-stoichiometric chromium oxide comprising a negative charge.

12. The implantable device of Claim 3, further comprising a thrombotic-reducing drug.

13. A passivation solution for facilitating the formation of an amorphous oxide layer over an implantable device, said solution comprising:

sodium nitrate as an oxygen provider to facilitate formation of said amorphous oxide layer over the implantable device.

14. The passivation solution of Claim 13, further comprising pH buffer chemicals selected from the group consisting of sodium bicarbonate, sodium carbonate, sodium hydroxide, and combinations thereof, wherein said pH buffer chemicals functions as oxygen donors.

15. The passivation solution of Claim 13, further comprising sodium bicarbonate, sodium carbonate and sodium hydroxide, as pH buffer chemicals, in a ratio of approximately 1:1:1.

16. The passivation solution of Claim 13, further comprising sodium bicarbonate, sodium carbonate and sodium hydroxide, as pH buffer chemicals, in a ratio of approximately 1:1:10.

17. The passivation solution of Claim 13, further comprising sodium bicarbonate, sodium carbonate and sodium hydroxide, as pH buffer chemicals, in a ratio of approximately 1:1:20.

18. The passivation solution of Claim 13, further comprising nitric acid.

19. The passivation solution of Claim 13, further comprising hydrochloric acid.

20. A method of forming an amorphous oxide surface film over an implantable device, said method comprising the step of:

a. creating a pH buffering solution comprising sodium hydroxide.

21. The method of Claim 20, wherein said pH buffering solution further comprises sodium bicarbonate.

22. The method of Claim 21, wherein said pH buffering solution further comprises sodium carbonate.

23. The method of Claim 22, further comprising step b.: mixing said sodium bicarbonate, said sodium carbonate and said sodium hydroxide with distilled water.

24. The method of Claim 23, further comprising step c.: agitating said sodium bicarbonate, said sodium carbonate and said sodium hydroxide with said distilled water until dissolved so as to bring said pH buffering solution to a pH of approximately around or higher than 10.

25. The method of Claim 24, further comprising step d.: adding sodium nitrate to said pH buffering solution to yield a passivation solution.

26. The method of Claim 25, further comprising step e.: heating said passivation solution to boiling.

27. The method of Claim 26, further comprising step f.: adding the implantable device to the boiling said passivation solution to passivate the implantable device for a selected period of time, and thus facilitate the formation of said amorphous oxide surface film over the implantable device.

28. The method of Claim 27, wherein said passivation solution comprises a composition of approximately 1000g/l of sodium nitrate, approximately 15g/l of sodium bicarbonate, approximately 15g/l of sodium carbonate, and approximately 15g/l of sodium hydroxide.

29. The method of Claim 27, wherein said passivation solution comprises sodium nitrate within a range of approximately 10-2000 g/l.

30. The method of Claim 29, wherein said passivation solution comprises sodium bicarbonate within a range of approximately 0.1-50 g/l.

31. The method of Claim 30, wherein said passivation solution comprises sodium carbonate within a range of approximately 0.1-50 g/l.

32. The method of Claim 31, wherein said passivation solution comprises sodium hydroxide within a range of approximately 0.1-50 g/l.

33. A method of forming an amorphous oxide surface film over an implantable device, said method comprising the steps of:

a. creating a pH buffering solution comprising sodium hydroxide and water;

b. adding nitric acid to said pH buffering solution to yield a passivation solution.

34. The method of Claim 33, wherein said passivation solution comprises a pH value of approximately 2 or lower.

35. The method of Claim 34, wherein nitric acid solution comprises an approximately 1:1 ratio of concentrated nitric acid to water.

36. The method of Claim 35, further comprising step c.: heating said passivation solution to boiling.

37. The method of Claim 36, further comprising step d.: adding the implantable device to the boiling said passivation solution

to passivate the implantable device for a selected period of time, and thus facilitate the formation of said amorphous oxide surface film over the implantable device.

38. The method of Claim 37, wherein said passivation solution comprises a composition of approximately 1000g/l of sodium nitrate.

39. The method of Claim 37, wherein said passivation solution comprises sodium nitrate within a range of approximately 10-2000 g/l.

40. A method of forming an amorphous oxide surface film over an implantable device, said method comprising the steps of:

a. exposing the implantable device to a passivation solution comprising sodium nitrate, sodium bicarbonate and diluted hydrochloric acid, wherein said passivation solution comprises a pH value in a range of approximately 6.5 to approximately 7.5.

41. A method of forming an amorphous oxide surface film over an implantable device, said method comprising the steps of:

a. degreasing the implantable device;

b. pre-heating the implantable device;

c. pickling the implantable device;

d. passivating the implantable device within a passivation solution comprising sodium nitrate as an oxygen provider to facilitate formation of said amorphous oxide layer over the implantable device, and pH buffer chemicals selected from the group consisting of sodium bicarbonate, sodium carbonate, sodium hydroxide, and combinations thereof; and,

e. selectively rinsing the implantable device following any of said steps a-d.

42. The method of Claim 41, further comprising step f: drying and sterilizing the implantable device.